

## Claims

1. A method for detecting a connection fault and accordingly performing a switch-over in data communication in accordance with a set of rules based on Operation and Maintenance data communication principles, **characterized in that**  
 5        an interval for sending connectivity verification data information in the data communication is such that a real time based data communication is achievable.
2. A method according to claim 1, wherein the interval comprises approximately one connectivity verification packet per 10 milliseconds.  
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3. A method according to claim 2, wherein the interval comprises approximately one connectivity verification packet per 15 milliseconds.
4. A method according to claim 1, wherein the interval makes a fault detection from the connection fault in the data communication to occur in less than 50 milliseconds.  
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5. A method according to claim 4, wherein the interval further triggers the switch-over to occur in less than 50 milliseconds from an occurrence of the connection fault.
6. A method according to claim 1, wherein the real time based data communication presumes the switch-over to take place in less than 50 milliseconds from an occurrence of the connection fault.  
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7. A method according to claim 1, wherein the connection fault comprises a predetermined amount of consecutively missing or wrong connectivity verification packets in the data communication.
8. A method according to claim 1, wherein the data communication comprises at least one of Internet Protocol, Ethernet, and MPLS for real time telecommunication services.  
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9. A method according to claim 1, wherein the data communication comprises LSP based connection.

10. A method according to claim 1, wherein the data communication is based on a protection switching data communication principles.
11. A method according to claim 1, wherein Multiprotocol Label Switching is contained as a bearer for the data communication.
- 5 12. A method according to claim 11, wherein Multiprotocol Label Switching operates as a backbone for IP based data communication.
13. A method according to claim 1, wherein the real time based data communication is such that human senses any application based on the real time based data communication substantially immediate.
- 10 14. A method according to claim 1, wherein the data communication takes place between a source computing entity and a sink computing entity.
15. A method according to any preceding claims, wherein the connectivity verification data information comprises CV packets.
- 15 16. A system for detecting a connection fault and accordingly performing a switch-over in data communication between a source computing device and a sink computing device in accordance with a set of rules based on Operation and Maintenance data communication principles, **characterized in that**

an interval for sending connectivity verification data information in the data communication is such that a real time based data communication is

20 achievable.
17. A network entity for detecting a connection fault and accordingly performing a switch-over in data communication in accordance with a set of rules based on Operation and Maintenance data communication principles, **characterized in that**, the network entity comprises

25 means for sending connectivity verification data information with a frequency in the data communication such that a real time based data communication is achievable.
18. A network entity for detecting a connection fault and accordingly performing a switch-over in data communication in accordance with a set of rules based on

Operation and Maintenance data communication principles, **characterized in that**, the network entity comprises

means for receiving connectivity verification data information with a frequency in the data communication such that a real time based data communication is achievable.

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19. A computer program product comprising a program of instructions executable by a computing system for processing a detection of a connection fault and accordingly performing a switch-over in data communication in accordance with a set of rules based on Operation and Maintenance data communication principles, the computer program product comprising:

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computer program code for causing the system to send connectivity verification data information with a frequency in the data communication such that a real time based data communication is achievable.